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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,087	06/30/2003	Milton Gregory Matlock	8564-000029/US	8112

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EXAMINER

GOINS, DAVETTA WOODS

ART UNIT PAPER NUMBER

2612

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/608,087	<b>Applicant(s)</b> MATLOCK ET AL.	
	<b>Examiner</b> Davetta W. Goins	<b>Art Unit</b> 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7, 9-13 and 15-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Bowers et al. (US Pat. 6,529,135 B1).

In reference to claims 1, 5, 12, 18, 21, 23-25, Bowers discloses a) the claimed plurality of sensors for monitoring operating conditions of a motor, which is met by sensors include a vibration sensor 30 for measuring motor vibration, a flux sensor 33 for measuring magnetic flux generated by the motor, voltage sensors for measuring voltage applied to the stator winding 4 of the motor, and a stator winding insulation breakdown detector 52. The sensors also include an ambient temperature sensor 10a, a frame temperature sensor 10b, an inboard bearing temperature sensor 10c, an outboard bearing temperature sensor 10d, and a stator winding temperature sensor 10e (col. 3, lines 36-51), and b) the claimed removable data storage device for storing data relating to the monitored conditions and co-located from the motor, which is met by the preferred communications interface 56, such as an RS232 or RS485 or equivalent serial data interface, provides for transfer of the motor data stored in the memory 22 to an external computer, such as

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a personal data assistant (PDA). The interface 56 also provides for transferring new firmware instructions and parameters (such as motor design coefficients) from an external computer to the processor 18 (col. 18, lines 1-33).

In reference to claims 2, 10, 19, Bowers discloses the claimed database having stored therein tolerance values for operating conditions, which is met by processor 18 executes a set of instructions, hereinafter referred to as firmware, to periodically access and process the sensor information contained within the digital sensor data signal. Depending on the motor condition as indicated by the sensor data, the processor 18 may store the sensor data in the SRAM 22, and at times in the flash memory 20, for later download. When appropriate, the processor 18 sends an annunciation signal to an annunciator 28 to indicate that a problem exists (col. 4, lines 39-67).

In reference to claims 3, 4, 9, 11, 20, Bowers discloses the claimed data analysis component for comparing the data relating to the monitored operating conditions, and configured to provide a warning indication, which is met by once processor 18 determines that any of the sensed conditions from either sensor reaches a predetermined stored threshold (comparing), then a signal is sent to either annunciator 26 or 28 to indicate an alarm condition depending on which sensor (col. 4, lines 39-67; col. 5, lines 21-40; col. 7, lines 48-67).

In reference to claims 6, 13, 15, Bowers discloses the claimed removable data storage device is configured for remote interface, which is met by the connected PDA can be removed and used to

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transmit data to an external computer so that the motor information can be analyzed (col. 18, lines 1-33).

In reference to claims 7, 16, Bowers discloses the claimed power source, which is met by terminal block 11 along with isolated power supply 54 (Figure 3).

In reference to claim 17, Bowers discloses the claimed programmable device configured to store data to the data storage device at predetermined time intervals and maintaining storage of the data for a predetermined period of time, which is met by controller 60 including a programmable memory 62 for storing thresholds for each sensor (col. 7, lines 30-67).

In reference to claim 22, Bowers discloses the claimed method of providing a warning indication when at least one monitored condition is determined to exceed a threshold, which is met by controller 60 activates the annunciator 26 upon the winding temperature exceeding a threshold (col. 7, lines 48-58).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowers et al.

In reference to claims 8, 14, although Bowers does not specifically disclose the claimed user activated component for generating a signal when activated by a user, he does disclose that a PDA can be attached to have all motor data from memory 22 transferred via interface 56 to a remote computer (col. 18, lines 1-33). Since Bowers discloses a system that includes an input at the motor that allows communication of the sensed condition of the motor with a remote site, it would have been obvious to one of ordinary skill in the art at the time of the invention to include a user activated component, such as through Bowers' user interface, to allow the system to immediately determine the motor's condition upon retrieval from a user.

6. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davetta W. Goins whose telephone number is 571-272-2957. The examiner can normally be reached on Mon-Fri with every other Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



D.W.G.

August 21, 2006

Davetta W. Goins  
Primary Examiner  
Art Unit 2612